MULTIMEDIA UNIVERSITY ®

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2017/2018

PCA0150 – COMPUTER APPLICATIONS

(Foundation in Information Technology/ Foundation in Life Sciences)

30 MAY 2018
9.00 a.m. - 11.00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **THREE** pages (excluding the cover page).
2. Answer **ALL** questions.
3. Write your answers in the Answer Booklet.

Instructions: Answer **ALL** questions. Write your answers in the Answer Booklet.

QUESTION 1 [10 Marks]

a. Voice input is the process of entering input by speaking into a microphone. Explain with example the voice recognition?

(2 marks)

b. A scanner is a light-sensing input device that reads printed text and graphics then translates the results into a form the computer can process. Explain briefly the technology used by the Bar Code Readers, RFID Readers and MICR Readers.

(3 marks)

c. The processor, also called the central processing unit (CPU), interprets and carries out basic instructions that operate a computer. Describe the major components of the CPU.

(3 marks)

d. Explain the disk defragmenter tool. Give **ONE (1)** advantage of using disk defragmentation.

(2 marks)

QUESTION 2 [10 Marks]

a. A hot spot is a wireless network that provides Internet connections to mobile computers and devices. Explain the Internet Service Provider (ISP).

(2 marks)

b. Explain the difference between an IP address and a domain name. List **TWO (2)** popular top level domains. (3 marks)

c. Validation compares data with a set of rules or values to determine if the data meets certain criteria. Explain **THREE (3)** validity checks that can be used to ensure data integrity in a database. (3 marks)

d. System development activities are grouped into phases and is called the system development life cycle (SDLC). List **FOUR (4)** phases used in the SDLC.

(2 marks)

QUESTION 3 [10 Marks]

a. Multimedia refers to any computer-based presentation software or application that integrates at least two or more of these elements: text, graphics, animations, audio and video. What is the difference between animation and video?

(2 marks)

Continued...

b. Vector-based images are composed of key points and paths, which define shapes, and coloring instructions, such as line and fill colors. Give **TWO (2)** advantages of vector-based images. (2 marks)

c. Information transmitted over networks has a higher degree of security risk than information kept on an organization's premises. What is digital security risk? List **TWO (2)** common digital security risks.

(2 marks)

d. Information privacy refers to the right of individuals and companies to deny or restrict the collection, use, and dissemination of information about them. List **FOUR (4)** ways of how to safeguard personal information.

(4 marks)

QUESTION 4 [10 Marks]

a. What is videoconference? Give **ONE (1)** advantage of videoconference.

(2 marks)

b. What is the difference between nonimpact printers and impact printers?

(2 marks)

c. A storage medium is the physical material on which a computer keeps data, information, programs, and applications. What are the **TWO (2)** measures of the storage access time? (2 marks)

d. An operating system (OS) is a set of programs containing instructions that work together to coordinate all the activities among computer hardware resources. Explain **FOUR (4)** functions of an operating system.

(4 marks)

QUESTION 5 [10 marks]

a. Database management system provides several tools that allow users and programs to retrieve and maintain data in the database. Explain the difference between query language and structured query language. (2 marks)

b. A programming language is a set of words, abbreviations, and symbols that enable a software developer to communicate instructions to a computer or mobile device. How an interpreter differ from a compiler? (2 marks)

c. A multimedia application involves the use of multimedia technology for business, education and entertainment. Define the terms below:

i. Augmented reality
ii. Virtual reality
iii. Media player (3 marks)

Continued...

d. Phishing is a scam in which a perpetrator sends an official looking message that attempts to obtain your personal and/or financial information. Explain the terms below :

i. Spyware
ii. Adware
iii. Ransomware

(3 marks)

End of Paper